

WHITE PAPER
Prepared for the Center for Advanced Studies in Nutrition and Social Marketing
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Policy recommendations to improve the health of school-age children
July 20, 2006

This White Paper explains key elements of the 2007 Farm Bill's policy on critical public health protection. It is intended for dissemination to all interested parties in both the private and public sectors. It may also be used in U.S. Government professional education institutions for coursework and exercises on interagency practices and procedures. Wide dissemination of this unclassified White Paper is encouraged by all agencies of the U.S. Government.

I. Chronic Disease Prevention in the 21st Century

Despite being the wealthiest nation in the world, the U.S. experiences poor health outcomes compared to other countries, especially with regard to chronic diseases such as heart disease, cancer, and diabetes [Banks et al., 2006; Starfield, 2000]. To combat the onset of chronic disease, fruits, vegetables, and whole grains are featured in recommendations to improve U.S. public health [USDHHS, USDA, 2005]. The 26 million school meals served each day are an ideal way to provide nutrient-rich meals and education to children who are at high-risk of obesity and type 2 diabetes.

In 1995, the United States Department of Agriculture (USDA) responded to concerns about the nutritional quality of commodity foods offered through the USDA's school meal programs by partnering with the Department of Defense. The 2002 Farm Bill Purchase of Specialty Crops provision mandated that the Secretary use a minimum of \$50 million per year to purchase additional fresh fruits and vegetables through the Department of Defense Fresh Fruit and Vegetable Program for use in school meals.

II. Authors' intent

The Farm Bill is the next piece of legislation that will significantly impact the U.S. food supply and therefore, population health outcomes. By examining the school food program in the context of disease prevention, this paper provides a common agriculture-public health policy platform for the 2007 Farm Bill and other future legislation that could positively impact the health of school-age children in the U.S.

III. Barriers to food quality improvement

Interviews with a targeted sample of school food service directors ($n=27$) revealed that budgetary constraints and dependence upon the commodity food program were the main impediments to improving food quality.

- **High Administrative Costs**

There was consensus among study participants that improving school food requires a greater emphasis on healthy food and less emphasis on program eligibility. Currently, food service directors need to keep the food cost below one dollar per meal due to high administrative and labor costs thereby prohibiting expenditure on higher quality, healthier foods. High

administrative costs are due in large part to the paper work and computer systems required to track enrollment in the free and reduced price meal program (meal price varies by family income). One food service director explained, “Priorities need changing so there is less emphasis on paper work and more emphasis on food quality. \$1.37 out of \$2.27 goes to computer systems to keep track of free/reduced and labor; \$0.90 goes to the meal.”

- Inadequate commodity food program

When asked about their level of satisfaction with commodity foods, 26% of the food service directors said they were very satisfied, 44% said they were somewhat satisfied, and 19% said they were somewhat unsatisfied. When asked how the foods provided through the commodity distribution program could be improved, respondents made frequent requests for more low-fat and fresh produce items. They also requested that products offered simply meet USDA reimbursable requirements. Requests for commodity food changes were consistent with those menu changes that food service directors planned to implement in the coming year which included increasing healthy options such as more fresh, vegetarian, and organic food.

Despite frequent requests for more fresh and low-fat commodity offerings, nearly half (48%) of the food service directors interviewed did not receive fresh fruits and vegetables through commodity distribution. When asked how the commodity food program could be improved, three food service directors stated their preference to purchase local, seasonal produce rather than through the Department of Defense. The availability of non-seasonal produce was considered poor use of program funds by a food service director, who had arrived at the job part way through the school year. She found that the managers were ordering strawberries, cantaloupe, and watermelon in December. Because these items were offered outside of peak season and were priced accordingly, their commodity allotment was expended before the year’s end. She stated that the problem with the Department of Defense program was “the idea that it’s free, and that we can get whatever we want whenever we want without keeping seasonal without still thinking about what’s the best purchase for the tax payers’ dollar.”

Four food service directors indicated that most of their commodity allotment goes toward the more expensive meat and cheese products, leaving none for fresh produce. One food service director emphasized the dependence on commodity offerings as a barrier to offering healthier choices to school children, noting that “what they offer is a lot of beef, and cheese, and pork, and a lot of high fat food items.” She went on to say, “They need to be offering us other types of protein items that are less fatty,” citing legumes and meat alternates as examples. Though there was a demand for tofu to improve the nutrient profile in schools meals, food service directors were again limited by commodity offerings. “Soy beans are one of the commodities that they process a lot of. I don’t know why they can’t deliver tofu and start meeting these needs but they haven’t so that’s a challenge...It would be wonderful because tofu’s got to be cheaper than chicken or beef, especially from commodity soy beans.”

The need for autonomy within a consistent message was emphasized repeatedly. In the case of increasing the amount of fresh fruits and vegetables, food service directors are provided with quality, affordable produce through Department of Defense program but are prohibited from specifying the produce origin because doing so is considered an unfair bidding practice by the USDA. This was a source of frustration because food service directors found they were able to increase availability of nutritious food to students and run fiscally responsible programs by sourcing directly from local farmers. “Because we sell fresh fruit everyday, getting fruit directly

from the grower, there's a cost savings there. So if a child wants to have 2 nectarines, we don't have a problem with that as long as the child eats it."

Nutrient analysis requirements also pose unnecessary challenges for school food providers. One agency employee explained that in one district's salad bar, "they had to add dressing, sugar-coated fruit, and crackers with cinnamon and sugar with them to make sure they have enough calories." While it is of utmost importance to provide nourishing meals through the school meal program, adding simple carbohydrates in the form of sugar-coated crackers is counter-productive to obesity prevention efforts. This point supports previous data showing that nutrient standards alone are insufficient to insure that food is healthy [Center for Weight and Health, 2005].

IV. Policy Recommendations

US farm policy is meant to ensure access to a healthy, safe, and secure food supply in the U.S. Future legislation would positively impact farms and school children by

- using U.S. Census indicators to determine meal program eligibility so that school food programs have an adequate food budget, labor force, and kitchen facilities to serve nutritious meals
- increasing the quantity and variety of whole plant foods offered through commodity distribution and decreasing their price relative to animal foods
- removing the cap on fresh produce purchases and allowing food service directors to prioritize regional food sources during bidding
- providing direct support for farmers to grow diversified plant crops and subsidizing the infrastructure to facilitate consumption of regional agricultural goods

The first policy recommendation is to remove the responsibility of determining program eligibility from school food programs so that there are adequate funds for the food budget, labor force, and kitchen facilities to serve nutritious meals. The U.S. Census is an ideal set of indicators by which to measure poverty in communities and there is no reason that school food services should duplicate these efforts—especially in low-income communities of color, where there are disproportionate rates of all chronic diseases.

The second recommendation is to increase the amount of whole plant foods (grains, legumes, fruits, vegetables, and nuts) on the commodity food list. Rather than placing the burden of conducting nutrient analysis at the district-level, the USDA should ensure the nutritional integrity of all commodity food offerings. To incentivize the use of these commodities, the price of plant foods must reflect the lower cost of production. Tofu was one suggested plant-based food that could displace some of the ubiquitous animal-based products currently found on school menus. Despite record plantings of nearly 77 million acres of soy in 2006 [1], no tofu is offered through the commodity meal program. This is particularly paradoxical because tofu is far less expensive to produce than beef and other animal products. Even if commodity tofu were offered, the current commodity pricing structure does not reflect the lower cost of plant food production compared to animal foods. On the contrary, the average cost per serving of animal foods (beef, chicken, cheese, pork, fish, dairy) offered through the commodity food list is slightly *lower* than that of plant foods (fruits, vegetables, grains, beans, nuts) at \$0.08 compared to \$0.09, respectively [2].

The third recommendation is to resolve the contradictions of the USDA meal program. The current cap on Department of Defense fresh produce purchases exemplifies the contradictory nature of federal meal programs, which are required to use surplus commodities *and* meet recommendations of the U.S. Dietary Guidelines. School meals will not meet all of the Dietary Guidelines as long as meat and dairy are required daily components of meals and only 6.1% of the commodity allotment can be used towards fresh produce. Removing the cap on fresh produce is the first step in resolving this contradiction.

The next step in resolving the program incongruity is to eliminate the bidding rule that prohibits regional specification. Though current regulations may be designed with the intent to conduct fair bidding processes, the reality is that schools are not able to support farmers in their communities through meal programs as they prefer to and are encouraged to do by the federal government. Being allowed to buy locally is an especially valid request considering the fact that the same policy that authorized funding for the Department of Defense Program also encouraged institutions participating in the school lunch program to purchase “locally produced foods for school meal programs, to the maximum extent practicable” (see Appendices A and B). Despite this language, USDA bidding requirements currently prohibit regional specification of produce items. The mixed messages received by food service directors compromise their ability to improve school nutrition.

Finally, improving public health in the U.S. depends upon re-directing funding support to a diversity of farmers for the purpose of adequately nourishing the population. The structure of 2007 Farm Bill payments are of particular interest due to the 2004 World Trade Organization ruling that the current method of payments violates international trade law [IATP, 2004]. 2007 Farm Bill payments may ensure a legitimate, safe, and healthy food supply by providing (a) direct support for farmers growing diversified plant crops and (b) the infrastructure to direct market agricultural goods. Direct support for farmers can be achieved by subsidizing sustainably-grown plant crops for human consumption rather than high-input crops for processed food and animal feed. The purpose of funding the infrastructure to grow, process, and distribute food is to prevent profit loss to industry intermediaries.

The costs of reformatting the subsidy payments and allowing regional specification are likely far outweighed by the accompanying benefits. Wholesome food that has undergone minimal processing offered through regional outlets ensures optimal nutritional quality for consumers. Providing a diet that promotes optimal health would reduce the health care costs associated with nutrition-related diseases— currently estimated to exceed \$18 billion annually— by giving children the opportunity to develop a taste for healthy foods. The financial support for farmers could be substantial considering that approximately \$4 billion is spent annually on surplus agricultural commodities.

Appendix A. Section 4303 of the Farm Security and Rural Investment Act of 2002

SEC. 4303. PURCHASES OF LOCALLY PRODUCED FOODS.

Section 9 of the Richard B. Russell National School Lunch Act (42 U.S.C. 1758) is amended by adding at the end the following:

“(j) PURCHASES OF LOCALLY PRODUCED FOODS.—

“(1) IN GENERAL.—The Secretary shall—

“(A) encourage institutions participating in the school lunch program under this Act and the school breakfast program established by section 4 of the Child Nutrition Act of 1966 (42 U.S.C. 1773) to purchase, in addition to other food purchases, locally produced foods for school meal programs, to the maximum extent practicable and appropriate;

“(B) advise institutions participating in a program described in subparagraph (A) of the policy described in that subparagraph and post information concerning the policy on the website maintained by the Secretary; and

“(C) in accordance with requirements established by the Secretary, provide startup grants to not more than 200 institutions to defray the initial costs of equipment, materials, and storage facilities, and similar costs, incurred in carrying out the policy described in subparagraph (A).

“(2) AUTHORIZATION OF APPROPRIATIONS.—

“(A) IN GENERAL.—There is authorized to be appropriated to carry out this subsection \$400,000 for each of fiscal years 2003 through 2007, to remain available until expended.

“(B) LIMITATION.—No amounts may be made available to carry out this subsection unless specifically provided by an appropriation Act.”.

Appendix B. Memo Regarding "Purchases of Locally Produced Foods" in 2002 Farm Bill

May 16, 2002

SUBJECT: Purchases of Locally Produced Foods in the School Nutrition Programs

TO: Regional Directors, All Regions

Special Nutrition Programs

Section 4303 of the Farm Security and Rural Investment Act of 2002 adds a new paragraph (j) at the end of section 9 of the Richard B. Russell National School Lunch Act pertaining to purchases of locally produced products. The provision requires the Secretary to encourage institutions participating in the school lunch and breakfast programs to purchase locally produced foods, to the maximum extent practicable.

We are asking you and your State agencies to encourage school food authorities participating in the National School Lunch and School Breakfast Programs to purchase locally produced foods, to the maximum extent practicable, along with other foods. This provision does not absolve school food authorities of their obligation to adhere to all applicable procurement requirements. School food authorities should be reminded that all purchases must be made competitively, consistent with Federal and State procurement laws and regulations. Purchases of this type would generally qualify as small purchases under procurement requirements and therefore may be procured using informal procedures. School food authorities should check with their administering State agency to determine appropriate small purchase requirements and with their State Department of Agriculture for more information on locally produced foods.

This is a good time of year to encourage the purchase of locally produced products and to encourage the planning for next school year's purchase of such products. Most regions in the country have an abundance of locally produced fruits, vegetables, herbs and nuts to enhance the meals served to children. Additionally, studies by the U.S. Department of Health and Human Services, U.S. Department of Agriculture (USDA), and the National Academy of Sciences suggest that due to the phytochemical content of fruits and vegetables, as part of a diet that is low in fat, saturated fat and cholesterol and that contains plenty of whole-grain breads and cereals, may decrease the risk of heart disease and cancer. Since a variety of fruits and vegetable can be purchased locally, this fits into our overall goal of providing nutritious, well-balanced meals to children.

In the summer of 1997, USDA began a comprehensive effort to connect small farms to the school meal programs. The "farm to school" initiative encourages small farmers to sell fresh fruits and vegetables to schools and encourages schools to buy this wholesome produce from small farmers. A copy of "Small Farms/School Meals Initiative", a step by step guide on how to bring small farms and local schools together, is available to assist you in your efforts to purchase locally produced foods at www.fns.usda.gov/cnd/Lunch/SmallFarms/small.pdf.

If you have any question, please contact Mary Jane Whitney at (703) 305-2590.

STANLEY C. GARNETT

Director
Child Nutrition Division

Notes

1. USDA-FNS. <http://www.fns.usda.gov/oane/MENU/Published/CNP/cnp.htm>
2. California Department of Education. <http://www.cde.ca.gov/ls/nu/fd/offeringinfo.asp>

References

- Banks J, Marmot M, Oldfield Z, Smith JP (2006). "Disease and Disadvantage in the United States and in England." *JAMA* 295:2037-2045.
- Center for Weight and Health (2005). "Linking Education, Activity, and Food (LEAF) Fiscal impact report." University of California-Berkeley. Accessed March 8, 2006 at: http://www.cnr.berkeley.edu/cwh/PDFs/LEAF_Fiscal_Impact_Report_FINAL_4.21.05.pdf
- [EWG] Environmental Working Group (2005). "New EWG Farm Subsidy Database Reignites Reform Efforts." Accessed March 8, 2006 at: <http://www.ewg.org:16080/farm/findings.php>
- [IATP] Institute for Agriculture and Trade Policy. "WTO Ruling Against U.S. Cotton Has Broad Ramifications for Farm Policy." Accessed March 8, 2006 at: http://www.iatp.org/iatp/library/admin/uploadedfiles/WTO_Ruling_Against_US_Cotton_Has_Broad_Ramific.pdf
- Starfield B (2000). "Is US Health Really the best in the world?" *JAMA*. 284(4): 483-485.
- [USDHHS, USDA] United States Department of Health and Human Services, United States Department of Agriculture (2005). "Dietary Guidelines for Americans." Accessed March 8, 2006 at: <http://www.health.gov/DietaryGuidelines/>